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	DC 20006-54	103		ART UNIT PAPER NUMBER	
				2176	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/900,186	NARAHARA, KOUICHI				
Office Action Summary	Examiner	Art Unit				
	Nathan Hillery	2176				
The MAILING DATE of this communication ap	<u> </u>	with the correspondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perioc Failure to reply within the set or extended period for reply will, by statur Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN. 136(a). In no event, however, may a will apply and will expire SIX (6) Mode, cause the application to become	IICATION. a reply be timely filed DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 26.	June 2006.					
,	<u> </u>					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits						
closed in accordance with the practice under	Ex parte Quayle, 1935 C	D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-13 and 52-85</u> is/are pending in the	e application.					
4a) Of the above claim(s) is/are withdra	awn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-13 and 52-85</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examir	ner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ ac						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the corre						
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attach	ed Office Action of form P1O-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C	§ 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documer		Application No.				
2. Certified copies of the priority documer						
 Copies of the certified copies of the pri application from the International Bure 		in received in this National Stage				
* See the attached detailed Office action for a lis	•	ot received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)		v Summary (PTO-413) o(s)/Mail Date				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice o	f Informat Patent Application				
Paper No(s)/Mail Date S. Patent and Trademark Office	6)					

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DETAILED ACTION

- 1. This action is responsive to communications: Amendment filed on 6/26/06.
- 2. Claims 1 3, 52 85 are pending in the case. Claims 1, 66, 82 85 are independent.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 − 3, 52 − are rejected under 35 U.S.C. 103(a) as being unpatentable over Brobst et al. (US 6061700 A) and further in view of IBM (NNRD 423111) and Miyashita (JP 08255255 A).
- 5. Regarding independent claim 1, Brobst et al. teach that the method and apparatus of the present invention has particular applicability to formatting web pages on the Internet ... A user that wishes to access information on the Internet 170 typically has a computer workstation 200 that executes an application program known as a web browser 210. Under the control of web browser 210, workstation 200 sends a request for a web page over the Internet 170 (Column 2, lines 54 61), which meet the limitation of inputting document information composed of a plurality of elements, from a document information source (Internet).



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Brobst et al. do not explicitly teach reading the blocks in said input document information; analyzing tags and elements in the document entity according to the rule defined by the document-type declaration to convert the document entity to a tree structure; evaluating a degree of significance for each element; adding a result of the evaluation to the tree structure; and generating the output document by reducing an information content of the input document information according to the result added to the tree structure.

However, IBM teaches that In the "Document Tree Generation" stage the Translation Engine tokenizes the page into a set of HTML elements (i.e. <applet ..>, , , etc.) Each element is then processed by the transform beans which registered to process them. Transform Beans generate tree nodes which are aggregated to yield a document tree. HTML documents which are not well formed will vield an "invalid tree", in which tags that are not nested properly will be indicated by "broken limbs" as well as fragmented tree nodes. Transform Beans consult the preference accessor to resolve Orion preferences. The HTML tags are coalesced with the preference information to yield an XML element which indicates the original HTML construct as well as the transformation bias indicated by the persistent preferences. Tree Nodes encapsulate the generated XML elements. All invalid trees must undergo the next processing stage, Well Formedness Conformance Mandate. The resulting valid tree represents a well-formed document (p 4, third and fourth paragraphs), which meet the limitation of reading the blocks in said input document information; analyzing tags and elements in the document entity according to the rule defined

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by the document-type declaration to convert the document entity to a tree structure.

IBM also teaches that the final stage of processing is to simply map valid document trees to well formed documents. Thus starting at the root node the tree is recursively traversed to yield a resulting document (p 4, penultimate paragraph), which meet the limitation of generating the output document by reducing an information content of the input document information according to the result added to the tree structure.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. with the disclosure of IBM because such a combination would provide the users of Brobst et al. with a *Trans-Proxy* architecture designed to modify web content to accommodate device, browser and network bandwidth limitations as well as user preferences (p 2, lines 1 – 2).

Neither Brobst et al. nor IBM explicitly teach evaluating a degree of significance for each element; adding a result of the evaluation to the tree structure.

However, Miyashita does teach that in an importance detection part 210, the importance of each element composing a document is determined...In an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from the elements arranged in each rectangular area and performing adjustments by eliminating / deleting / dividing / reducing the part of the width of the

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element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution), which meet the limitation of evaluating a degree of significance for each element; adding a result of the evaluation to the tree structure.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBM with that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

6. Regarding dependent claims 2 and 3, Brobst et al. teach that because apparatus 500 flattens many lined web pages into a single conglomerate web page, the standard print function supplied with any browser will print the conglomerate web page. The function of mechanisms 540-560 may best be understood with relation to the flow diagram of FIG. 6 (Column 6, lines 48 – 53), which meet the limitation of outputting said output document to an image outputting device or an image transmission device, that said image outputting device is a printing device or a display device, and said image transmission device is a facsimile device.

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7. Regarding dependent claim 52, Brobst et al. also teach that according to the present invention, an apparatus and method for formatting a specified group of related web pages into a single web page is disclosed. A user defines a number of selected pages and associated relation criteria for each selected page. A formatting mechanism collects the URLs for the selected pages and those related pages based on the relation criteria and stores the URLs in a URL container. The formatting mechanism further invokes each web page associated to the URLs contained in the URL container and generates a conglomerate page. The conglomerate web page may include data insert into or referenced in one or more of the selected pages. The conglomerate web page may then be printed using a standard browser print function (Column 1, line 66 – Column 2, line 12).

Brobst et al. do not explicitly teach selecting an element among said plurality of elements in a decreasing significance order.

It would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to use the invention of Brobst et al. to provide for **selecting an element among said plurality of elements in a decreasing significance order and placing the selected element on said output document**, since Brobst et al. do teach that the relation criteria is an important element in the formatting process because it defines the requisite association that must exist between a number of URLs to be deemed "related" URLs and therefore defines which pages to include in the flattened page (Column 5, lines 33 – 37). Thus, the skilled artisan would be motivated to modify the invention so that the users retrieve only the information set by their criteria.

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8. Regarding dependent claims 53 and 54, Brobst et al. teach that suitable relation criteria for relating URLs include: whether or not the URLs are on the same web server; whether a specific search word appears in the web URLs search list; whether there is a link between the URLs; or whether the URLs have the same base address (Column 6, lines 1 – 5), which meet the limitation of said evaluation unit evaluates the degree of significance for said each element included in said document information, based on significance defining information described in said document information, and said evaluation unit evaluates the degree of significance for said each element included in said document information, based on a fixed significance-evaluating standard.

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9. Regarding dependent claims 59 and 60, Brobst et al. teach that how these attributes are processed depends on the relation criteria specified by the user... the user may specify a relation criteria that includes all URLs that have the FOLLOW attribute, excludes those that have a NOFOLLOW attribute, and excludes those that have a SHOULDFOLLOW attribute. In yet another alternative, URLs with a FOLLOW or SHOULDFOLLOW attribute are included in the conglomerate web page while the URLs that have the NOFOLLOW attribute are expressly excluded (Column 10, lines 16 – 27), which meet the limitation of said process unit eliminates an element whose degree of significance is lower than a specific significance level and that said specific significance level differs with an attribute of said each element.

10. Regarding dependent claims 55 – 58, Brobst et al. nor IBM explicitly teach limits ... based on a predetermined page size and a predetermined number of pages of said output document.

However, Miyashita does teach that in an importance detection part 210, the importance of each element composing a document is determined. In an element width calculation part 220, the height of each element is conformed to the height of a rectangular area, the width of each element according to the height is calculated and the width of a sentence element is adjusted so that the lengths of all the elements may be matched with the lengths of all rectangular areas. In an element temporary arranging part 230, each element is successively arranged on the column of a prescribed rectangular area in order. In an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from the elements arranged in each rectangular area and performing adjustments by eliminating/deleting/dividing/reducing the part of the width of the element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution), which meet the limitation of said process unit limits the element to be placed on said output document, based on a predetermined page size and a predetermined number of pages of said output document, which are specified by output constraint information, that said process unit limits the element to be placed on said output document so that a

total space occupied by said plurality of selected elements on said output document is less than or equal to a space limit determined by the page size and the number of pages, that said process unit continues selecting the element until said total space exceeds said space limit, and eliminates a most-recently selected element from said output document, that said process unit continues selecting the element until said total space exceeds said space limit, and reduces a size of at least a part of said plurality of selected elements so that said total space becomes less than or equal to said space limit.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBM with that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

11. Regarding dependent claims 61 and 62, neither Brobst et al., IBM, nor Miyashita explicitly teach keeping a text element and eliminating a non-text element.

However, Miyashita does teach that in an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from

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eliminating/deleting/dividing/reducing the part of the width of the element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution). The skilled artisan would be motivated to modify the combined invention of Brobst et al., IBM and Miyashita to provide that the specific significance level of a non-text element is higher than that of a text element, and that said process unit keeps a text element, and eliminates a non-text element, by providing the user with the option to set all of the non-text elements as having a higher or lower importance than the text elements in order to allow the user the option of a limited text or limited image conglomerate page because of the user's limited computing resources.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBMwith that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

12. **Regarding dependent claims 63 and 64**, neither Brobst et al., IBM, nor Miyashita explicitly teach **compression method or rate**.

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However, Miyashita does teach that in an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from the elements arranged in each rectangular area and performing adjustments by eliminating/deleting/dividing/reducing the part of the width of the element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution). The skilled artisan would be motivated to modify the combined invention of Brobst et al., IBM and Miyashita to provide that said process unit compresses a non-text element by using a compression method corresponding to the degree of significance of said non-text element, and that said process unit compresses a non-text element at a compression rate corresponding to the degree of significance of said non-text element, since Miyashita teaches reducing and so that the skilled artisan can provide his users with a conglomerate page that a user with limited computing resources can output on his display without using a lot of memory.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBM with that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

13. **Regarding dependent claim 65**, neither Brobst et al., IBM, nor Miyashita explicitly teach **first and significance level**.

However, Brobst et al. do teach that how these attributes are processed depends on the relation criteria specified by the user... the user may specify a relation criteria that includes all URLs that have the FOLLOW attribute, excludes those that have a NOFOLLOW attribute, and excludes those that have a SHOULDFOLLOW attribute. In yet another alternative, URLs with a FOLLOW or SHOULDFOLLOW attribute are included in the conglomerate web page while the URLs that have the NOFOLLOW attribute are expressly excluded (Column 10, lines 16 – 27).

Miyashita does teach that in an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from the elements arranged in each rectangular area and performing adjustments by eliminating/deleting/dividing/reducing the part of the width of the element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution).

The skilled artisan would be motivated to modify the combined invention of Brobst et al., IBM and Miyashita to provide that said process unit eliminates a text element whose degree of significance is lower than a first significance level, and compresses a non-text element whose degree of significance is lower than a second significance level, since the skilled artisan can modify the combined invention

to allow the user to set the text elements below the relation criteria to the NOFOLLOW attribute and the non-text elements below the relation criteria to the SHOULDFOLLOW attribute and compress the non-text elements so as to provide the user with a conglomerate page that a user with limited computing resources can output on his display without using a lot of memory, and making the user not feel as if he has limited resources.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBM with that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

- 14. **Regarding claims 66 83**, the claims incorporate substantially similar subject matter as claims 1 3, 52 65, and are rejected along the same rationale.
- 15. **Regarding independent claims 84 and 85**, Brobst et al. teach that the method and apparatus of the present invention has particular applicability to formatting web pages on the Internet ... A user that wishes to access information on the Internet 170 typically has a computer workstation 200 that executes an application program known as a web browser 210. Under the control of web browser 210, workstation 200 sends a

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request for a web page over the Internet 170 (Column 2, lines 54 – 61), which meet the limitation of inputting document information from a document information source, said document information source being composed of a plurality of elements.

Brobst et al. teach that because apparatus 500 flattens many lined web pages into a single conglomerate web page, the standard print function supplied with any browser will print the conglomerate web page. The function of mechanisms 540-560 may best be understood with relation to the flow diagram of FIG. 6 (Column 6, lines 48 – 53), which meet the limitation of outputting the generated output document on a printing device, a display device, or an image transmission device.

Brobst et al. do not explicitly teach evaluating a degree of significance of each element of said input document information; selecting in succession an element among said plurality of elements of said input document information in a decreasing significance order based on a result of the evaluating step; generating the output document in which the selected elements are placed in a selecting order in the selecting step; wherein in the evaluating step includes the steps of: determining whether the input document information is XML document information; reading a document-type declaration and a document entity of the input document information if it is determined that the input document information is XML document described in the document entity by using a regulation set in the document-type declaration; and converting the document entity to a tree structure.

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However, IBM teaches that In the "Document Tree Generation" stage the Translation Engine tokenizes the page into a set of HTML elements (i.e. <applet ..>, , , etc.) Each element is then processed by the transform beans which registered to process them. Transform Beans generate tree nodes which are aggregated to yield a document tree. HTML documents which are not well formed will vield an "invalid tree", in which tags that are not nested properly will be indicated by "broken limbs" as well as fragmented tree nodes. Transform Beans consult the preference accessor to resolve Orion preferences. The HTML tags are coalesced with the preference information to yield an XML element which indicates the original HTML construct as well as the transformation bias indicated by the persistent preferences. Tree Nodes encapsulate the generated XML elements. All invalid trees must undergo the next processing stage, Well Formedness Conformance Mandate. The resulting valid tree represents a well-formed document (p 4, third and fourth paragraphs), which meet the limitation of the evaluating step includes the steps of: determining whether the input document information is XML document information; reading a document-type declaration and a document entity of the input document information if it is determined that the input document information is XML document information; separating a tag and an element described in the document entity by using a regulation set in the document-type declaration; and converting the document entity to a tree structure.

IBM also teaches that the final stage of processing is to simply map valid document trees to well formed documents. Thus starting at the root node the tree is

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recursively traversed to yield a resulting document (p 4, penultimate paragraph), which meet the limitation of generating the output document in which the selected elements are placed in a selecting order in the selecting step.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. with the disclosure of IBM because such a combination would provide the users of Brobst et al. with a *Trans-Proxy* architecture designed to modify web content to accommodate device, browser and network bandwidth limitations as well as user preferences (p 2, lines 1 – 2).

Neither Brobst et al. nor IBM explicitly teach evaluating a degree of significance of each element of said input document information; selecting in succession an element among said plurality of elements of said input document information in a decreasing significance order based on a result of the evaluating step.

However, Miyashita does teach that in an importance detection part 210, the importance of each element composing a document is determined...In an arrangement adjusting part 240, the element arranged in each rectangular area is adjusted so that the element may be properly stored in each rectangular area by selecting an element for adjustment from the elements arranged in each rectangular area and performing adjustments by eliminating / deleting / dividing / reducing the part of the width of the element for adjustment, based on the importance for each element. Normally, the element with low importance is selected as the element for adjustment (Constitution),

which meet the limitation evaluating a degree of significance of each element of said input document information; selecting in succession an element among said plurality of elements of said input document information in a decreasing significance order based on a result of the evaluating step.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Brobst et al. and IBM with that of Miyashita because such a combination would allow the users of Brobst et al. and IBM the benefit of providing a document information display device arranging document information including characters, drawings and pictures, etc., within the limited area of a display device so that contents may be easy to be recognized and displaying the document information (Purpose).

Response to Arguments

- 16. Applicant's arguments filed 11/23/05 have been fully considered but they are not persuasive.
- 17. Applicant argues that neither Brobst, IBM, nor Miyashita, even when combined, disclose, teach, or suggest evaluating a degree of significance for each element and adding a result of the evaluation to the tree structure (p 13, third paragraph). Specifically, Applicant argues that Miyashita (reference on which the Office relies) does not teach evaluating a degree of significance for each element and adding a result of the evaluation to the tree structure because Miyashita relates to a system for

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arranging document information within the limited area of a display device (p 14, first full paragraph).

The Office disagrees.

By Applicant's own admission, Miyashita discloses that the invention calculates the relative importance of each document element of input document information, calculates the size of each element, and arranges each element in the prescribed rectangular area in order (p 14, first full paragraph, lines 7 – 10), which meet the limitation of **evaluating a degree of significance for each element**, since relative importance is equivalent to **a degree of significance**.

It should also be noted that Miyashita further teaches that normally, the element with low importance is selected as the element for adjustment, which includes eliminating, deleting, dividing, or reducing the part of the width of the element for adjustment (Constitution), which meet the limitation of adding a result of the evaluation to the tree structure, at least in combination with the disclosure of IBM, since IBM teaches that the HTML tags are coalesced with the preference information to yield an XML element which indicates the original HTML construct as well as the transformation bias indicated by the persistent preferences. Tree Nodes encapsulate the generated XML elements (p 4, last two sentences of third paragraph [as cited above under claim 1]) and since IBM also teaches that a subset of Trans-Proxy Transformation Preferences are disposing images, scaling images, etc. (p 3, second block paragraph).

In other words, the scaled or disposed images determined by the relative importance disclosed by Miyashita in combination with the preferences taken into

account by the transformation unit, specifically tree generator, disclosed by IBM meet the limitation of adding a result of the evaluation to the tree structure.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NH

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